

C) from 0.005 to 7% by weight, of a divalent ion selected from the group consisting of magnesium, calcium, and mixtures thereof.

31. (New) A composition according to Claim 30 wherein said disrupted hydrocarbyl moiety B comprises one or more chiral carbon atoms as said disrupting unit.
32. (New) A composition according to Claim 31 wherein said disrupted moiety B comprises a disruption which is the substitution of a hydrogen atom from carbon by a hydroxyl moiety.
33. (New) A composition according to Claim 31 wherein said disrupted moiety B comprises a disruption which is the insertion of a moiety into the hydrocarbyl chain, said moiety selected from the group consisting of -O-, -OSi(CH₃)₂O-, -SO₂-, and mixtures thereof.
34. (New) A composition according to Claim 30 further comprising an alkylarylsulfonate surfactant having the formula:
- $$(L-Ar-D)_a(M^{q+})_b$$
- wherein L is a C₅-C₂₀ linear hydrocarbyl unit.
35. (New) A composition according to Claim 30 wherein at least 60% of said alkylarylsulfonate surfactants have said Ar-D bonded to B at the second or third atom of the B unit hydrocarbyl chain.
36. (New) A composition according to Claim 30 further comprising a surfactant selected from the group consisting of alkylene carbonates, monoalkyl succinamates, alkylpolysaccharides, ethoxylated glycerol type compounds, and mixtures thereof.
37. (New) A composition according to Claim 30 wherein said alkylarylsulfonate surfactant admixture has a Sodium Critical Solubility Temperature of 20° C or less.
38. (New) A composition according to Claim 37 wherein said alkylarylsulfonate surfactant admixture has a Sodium Critical Solubility Temperature of 80° C or less.
39. (New) A composition according to Claim 30 wherein said adjunct ingredient is selected from the group consisting of builders, detergent enzymes, at least partially water-soluble of water dispersible polymers, abrasives, bactericides, tarnish inhibitors, dyes, solvents, hydrotropes, perfumes, thickeners, antioxidants, processing aids, suds boosters, suds suppressors, suds stabilizers, diamines, carriers, enzyme stabilizers, polysaccharides, buffers, anti-fungal agents, mildew control agents, insect repellents, anti-corrosive aids, chelants, and mixtures thereof.
40. (New) A composition according to Claim 30 further comprising from 0.5% to 25% by weight, of a polyalkyleneoxy nonionic surfactant, said surfactant comprising:

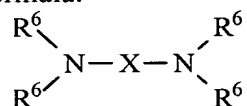
- i) a hydrophobic group selected from C₁₀-C₁₆ linear alkyl, C₁₀-C₁₈ alkyl having 1-3 carbon atom branching, C₁₀-C₁₆ Guerbet alkyl, and mixtures thereof; and
- ii) a hydrophilic group comprising from 1 to 15 C₂-C₄ alkyleneoxy units, said alkyleneoxy units having a capped or uncapped form.

41. (New) A composition according to Claim 30 further comprising from 0.5% to 25% by weight, of a C₁₀-C₁₆ linear alkyl sulfate, C₁₀-C₁₈ alkyl sulfate having 1-3 carbon atom branching, C₁₀-C₁₆ Guerbet alkyl sulfate surfactant, and mixtures thereof.

42. (New) A composition according to Claim 30 further comprising from 0.5% to 25% by weight, of an alkyl alkyleneoxy sulfate surfactant, said surfactant comprising:

- i) a hydrophobic group selected from C₁₀-C₁₆ linear alkyl, C₁₀-C₁₈ alkyl having 1-3 carbon atom branching, C₁₀-C₁₆ Guerbet alkyl, and mixtures thereof; and
- ii) a hydrophilic group comprising from 1 to 15 C₂-C₄ alkyleneoxy units, said alkyleneoxy units said units capped with a sulfate moiety.

43. (New) A composition according to Claim 30 further comprising a diamine having a pK_a of at least 8, said diamine having the formula:

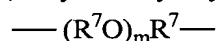


wherein each R⁶ is independently selected from the group consisting of hydrogen, C₁-C₄ alkyl, alkyleneoxy having the formula:



wherein R⁷ is C₂-C₄ linear or branched alkylene, and mixtures thereof; R⁸ is hydrogen, C-C₄ alkyl and mixtures thereof; m is from 1 to 10, X is a unit selected from:

- i) C₃-C₁₀ linear, cyclic, or branched alkylene, alkyleneoxyalkylene having the formula:



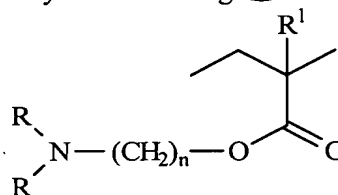
wherein R⁷ and m are the same as defined herein;

- ii) a C₃-C₁₀ linear, cyclic, or branched alkylene, C₆-C₁₀ arylene unit comprising one or more electron donating or electron withdrawing moieties which provide a nitrogen pK_a greater than 8;
- iii) and mixtures thereof.

44. (New) A composition according to Claim 43 wherein said diamine is selected from the group consisting of dimethyl amino propylenediamine, 1,6-hexane diamine, 1,3-propane diamine, 2-methyl-1,5-pentanediamine, 2,3-pentanediamine, 1,3-diaminobutane, 1,2-bis(2-aminoethoxy)ethane, isophoronediamine, 1,3-bis(methylamine)cyclohexane, and mixtures thereof.

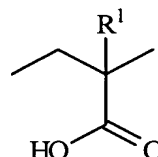
45. (New) A composition according to Claim 30 further comprising a polymeric or copolymeric suds stabilizer, said stabilizer having a molecular weight of from 1,000 to 2,000,000 daltons and comprising units selected from the group:

N,N-(dialkylamino) alkyl esters having the formula:



wherein each R is independently selected from Hydrogen C₁-C₈ alkyl, and mixtures thereof; R¹ is hydrogen, C₁-C₆ alkyl, and mixtures thereof; n is from 2 to 6;

ii) acids having the formula:

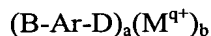


iii) and mixtures thereof.

46. (New) A hand dishwashing composition comprising:

A) from 0.1% to 99.9% by weight, of a surfactant system comprising:

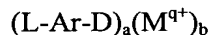
i) from 10% to 100% by weight, of an admixture of two or more alkylarylsulfonate surfactants having the formula:



wherein D is $-SO_3^-$, M is a cation, q is the cation valence, a and b are indices having values which provide said surfactant with charge neutrality; Ar is a C₆ aromatic ring; B is a C₅-C₂₀ disrupted hydrocarbyl moiety; said surfactant admixture has a Sodium Critical Solubility Temperature of 40° C or less; and at least one of the following:

- a modified SCAS test biodegradation which exceeds the value obtained for tetrapropylene benzene sulfonate; or
- a ratio of at least 5:1 by weight, of non-quaternary carbon atoms to quaternary carbon atom which comprise B;

ii) the balance one or more alkylarylsulfonate surfactant having the formula:



wherein L is a C₅-C₂₀ linear hydrocarbyl unit;

B) from 0.0001% to 99.9% by weight, of an adjunct ingredient; and

C) from 0.01% to 7% by weight, of an alkali metal salt selected from the group consisting of magnesium or calcium chloride, bromide, hydroxide, sulfate, and mixtures thereof.

46. (New) A composition according to Claim 45 further comprising from 0.5% to 25% by weight, of an alkyl alkyleneoxy sulfate surfactant, said surfactant comprising:

i) a hydrophobic group selected from C₁₀-C₁₆ linear alkyl, C₁₀-C₁₈ alkyl having 1-3 carbon atom branching, C₁₀-C₁₆ Guerbet alkyl, and mixtures thereof; and

09889632 074904

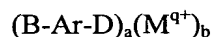
- ii) a hydrophilic group comprising from 1 to 15 C₂-C₄ alkoxy units, said alkylenoxy units said units capped with a sulfate moiety.

47. (New) A composition according to Claim 45 wherein said adjunct ingredient is selected from the group consisting of builders, detergent enzymes, at least partially water-soluble of water dispersible polymers, abrasives, bactericides, tarnish inhibitors, dyes, solvents, hydrotropes, perfumes, thickeners, antioxidants, processing aids, suds boosters, suds suppressors, suds stabilizers, diamines, carriers, enzyme stabilizers, polysaccharides, buffers, anti-fungal agents, mildew control agents, insect repellents, anti-corrosive aids, chelants, and mixtures thereof.

48. (New) A method for washing tableware comprising the step of contacting tableware with an aqueous solution containing a hand dishwashing composition comprising:

A) from 0.1% to 99.9% by weight, of a surfactant system comprising:

- i) from 10% to 100% by weight, of an admixture of two or more alkylarylsulfonate surfactants having the formula:



wherein D is $-SO_3^-$, M is a cation, q is the cation valence, a and b are indices having values which provide said surfactant with charge neutrality; Ar is a C₆ aromatic ring; B is a C₅-C₂₀ disrupted hydrocarbyl moiety; said surfactant admixture has a Sodium Critical Solubility Temperature of 40° C or less; and at least one of the following:

- a) a modified SCAS test biodegradation which exceeds the value obtained for tetrapropylene benzene sulfonate; or
b) a ratio of at least 5:1 by weight, of non-quaternary carbon atoms to quaternary carbon atom which comprise B;

ii) optionally one or more other detergent surfactants;

B) from 0.0001% to 99.9% by weight, of an adjunct ingredient; and

C) from 0.01% to 7% by weight, of a divalent ion selected from the group consisting of magnesium, calcium, and mixtures thereof.

49. (New) A method according to Claim 48 wherein said adjunct ingredient is selected from the group consisting of builders, detergent enzymes, at least partially water-soluble of water dispersible polymers, abrasives, bactericides, tarnish inhibitors, dyes, solvents, hydrotropes, perfumes, thickeners, antioxidants, processing aids, suds boosters, suds suppressors, suds stabilizers, diamines, carriers, enzyme stabilizers, polysaccharides, buffers, anti-fungal agents, mildew control agents, insect repellents, anti-corrosive aids, chelants, and mixtures thereof.

05889632 071904